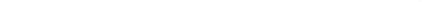


Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	10/663,662
		Filing Date	September 17, 2003
		First Named Inventor	Yasuko FUKUZAWA
		Art Unit	2186
		Examiner Name	
Sheet	1	of	1
		Attorney Docket Number	500.36172VC3

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	06/03/2004
-----------------------	---	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

09/17/03

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet	1	of	2	Application Number	Not yet assigned (Division of 10/326,978, filed December 24, 2003)
				Filing Date	Even date herewith
				First Named Inventor	Yasuko FUKUZAWA
				Art Unit	2182
				Examiner Name	Tanh Q. Nguyen
				Attorney Docket Number	500.36172VC3

U.S. PATENT DOCUMENTS						
Examiner Initials'	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
TQN	AA	US- 4,768,150		08/30/1988	Chang et al.	
	AB	US- 4,864,492		09/05/1989	Blakely-Fogel et al.	
	AC	US- 4,941,084		07/10/1990	Terada et al.	
	AD	US- 4,947,367		08/ 1990	Chang et al.	
	AE	US- 5,051,887		09/24/1991	Berger et al.	
	AF	US- 5,155,845		10/13/1992	Beal et al.	
	AG	US- 5,251,318		10/05/1993	Nitta et al.	
	AH	US- 5,261,080		11/09/1993	Khoyi et al.	
	AI	US- 5,313,617		05/17/1994	Nakano et al.	
	AJ	US- 5,349,656		09/20/1994	Kaneko et al.	
	AK	US- 5,388,013		02/07/1995	Nakamura	
	AL	US- 5,394,534		02/28/1995	Kulakowski et al.	
	AM	US- 5,504,882		04/ 1/1996	Chai et al.	
	AN	US- 5,530,819		06/25/1996	Day, III et al.	
	AO	US- 5,535,372		07/09/1996	Benhase et al.	
	AP	US- 5,546,536		08/ 1/1996	Davis et al.	
	AQ	US- 5,546,541		08/ 1/1996	Drew et al.	
	AR	US- 5,568,628		10/22/1996	Satoh et al.	
	AS	US- 5,613,100		03/18/1997	Anezaki	
	AT	US- 5,630,092		05/13/1997	Carrollo et al.	
	AU	US- 5,655,140		08/05/1997	Haddock	
	AV	US- 5,684,144		09/02/1997	Yanai et al.	
	AW	US- 5,680,580		10/ 1/1997	Beardsley et al.	
	AX	US- 5,680,640		09/01/1995	Ofek et al.	
	AY	US- 5,692,155		11/25/1997	Isklyan et al.	
	AZ	US- 5,708,828		01/13/1998	Coleman	
	BA	US- 5,721,957		02/24/1998	Huang et al.	
	BB	US- 5,724,542		03/03/1998	Taroda et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials'	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ⁴ -Number ⁵ -Kind Code ³ (if known)					
TQN	BC	JP-04-326420		11-16-1992			
TQN	BD	JP-07-152491		06-16-1995			

Examiner Signature	<i>Qingyung J. Lian</i>	Date Considered	06/03/2004
--------------------	-------------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

09/17/03

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<p>Substitute for form 1449A/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>				Complete If Known	
				Application Number	Not yet assigned (Division of 10/326,978, filed December 24, 2003)
				Filing Date	Even date herewith
				First Named Inventor	Yasuko FUKUZAWA
				Art Unit	2182
				Examiner Name	Tanh Q. Nguyen
Sheet	2	of	2	Attorney Docket Number	500.36172VC3

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number-Kind Code ³ (if known)			
TQN	BE	US- 5,734,818		03/31/1998	Kern et al.
	BF	US- 5,745,789		04/ /1998	Kakuta
	BG	US- 5,758,125		05/26/1998	Misinali et al.
	BH	US- 5,778,189		07/07/1998	Kimura et al.
	BI	US- 5,812,843		09/22/1998	Yamazaki et al.
	BJ	US- 5,835,939		11/10/1998	Kurokawa et al.
	BK	US- 5,860,088		01/12/1999	Benhase et al.
	BL	US- 5,875,479		02/23/1999	Blount et al.
	BM	US- 5,884,310		03/16/1999	Brichta et al.
	BN	US- 5,886,841		03/23/1999	Kikuchi
	BO	US- 5,903,913		05/ /1999	Ofer et al.
	BP	US- 5,978,890		11/02/1999	Ozawa et al.
	BQ	US- 6,009,498		12/28/1999	Kumasawa et al.
	BR	US- 6,041,391		03/21/2000	Kanda et al.
	BS	US- 6,044,444		03/28/2000	Ofek
	BT	US- 6,073,209		06/06/2000	Bergsten
	BU	US- 6,081,826		06/27/2000	Masuoka et al.
	BV	US- 6,098,129		08/ /2000	Fukusawa et al.
	BW	US- 6,108,748		08/22/2000	Ofek et al.
	BX	US- 6,115,797		09/05/2000	Kanda et al.
	BY	US- 6,329,976		03/ /2003	Fukuzawa et al.

OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		T ²
TQN	BZ	IBM Technical Disclosure Bulletin, Vol. 38, No. 06, June 1995, "High Performance Cooperative Count Key Data/Fixed Block Conversion Mechanism", pp. 333-335		
	CA	IBM Technical Disclosure Bulletin, Vol. 35, No. 3, August 1992, "Centralized and Rapid Backup/Restore For Work Lan File Services/VM", pp. 286-289		
	CB	Fujitsu Scientific & Technical Journal 31 (1995) June, No. 1. Kawasaki, JP "Storage Management Software for Mainframe and UNIX", By: Keiji Suzuki, et al. pp. 36-44		
✓	CC	Gelb, "System-managed storage," IBM Systems Journal, Vol. 28, No. 1, 1989, pp. 77-103		

Examiner Signature	<i>Tanh Q. Nguyen</i>	Date Considered	06/03/2004
--------------------	-----------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.